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10/535,636	05/20/2005	Jean-Sebastien Straetmans	DE020285US1	7716

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BRIARCLIFF MANOR, NY 10510

EXAMINER

HOLLWEG, THOMAS A

ART UNIT

PAPER NUMBER

2879

MAIL DATE

DELIVERY MODE

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/535,636

**Applicant(s)**

STRAETMANS ET AL.

**Examiner**

Thomas A. Hollweg

**Art Unit**

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8-19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-19 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 14, 2009, has been entered. No claims are added or canceled. Claims 1-6, 8-19 and 21-23 are currently pending.
2. Corrections for minor informalities are acknowledged. The previous objections to the claims, specification and drawings are withdrawn.
3. Amendments to the claims are acknowledged. The 35 U.S.C. § 112, first paragraph, rejections are withdrawn.

### ***Claim Objections***

4. The following claims are objected to because of the following informalities:
  - a. Claim 11, the phrase "covering one or more of the end part of the discharge vessel" only provides one alternative, therefore does not make sense.
  - b. Claim 18, "the end closure" lacks antecedent basis.Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**6. Claims 1-6, 10, 21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al., U.S. Patent No. 6,139,386.**

7. **With regard to claim 1**, in figure 12, Suzuki discloses a high-pressure burner comprising: at least one end closure member (17), and a discharge vessel (11, 12) that includes at least one end part (60) and a discharge cavity, wherein at least one coating layer (62A) and a sealant (61) are located and gas-tight connected between the end part (60) of the discharge vessel (11, 12) and the end closure member (17), wherein the at least one coating layer (62A) is located between the discharge vessel (11, 12) and the sealant (61), the end closure member (17) includes a feed-through opening (17a) for filling the discharge cavity (col. 8, lines 16-18), and a feed-through member (5) that extends through the feed through opening (17a) and is gas-tight connected to the end closure member (17) (col. 22, lines 5-39).

8. **With regard to claim 2**, in figure 12, Suzuki discloses that wherein the gas-tight bonding of the coating layer (62A) and the sealant (61) to the discharge vessel (11, 12) and the end closure member (17) is stronger than a direct gas-tight bonding of the sealant (61) to the end closure member (17) and discharge vessel (11, 12) (col. 3, lines 43-47).

9. **With regard to claim 3**, in figure 12, Suzuki discloses that the coating (62A) layer has an expansion coefficient in the range between  $4 \cdot 10^{-6}$  and  $12 \cdot 10^{-6} \text{ K}^{-1}$  (inherent of the materials (col. 4, lines 7-13 & 43-45)).

10. **With regard to claim 4**, in figure 12, Suzuki discloses that the coating layer (62A) is chemically resistant towards oxides and iodides (col. 4, line 30).
11. **With regard to claim 5**, in figure 12, Suzuki discloses that the coating layer (62A) is of a material comprising at least Mo (col. 4, line 28).
12. **With regard to claim 6**, in figure 12, Suzuki discloses that the coating layer (62A) covers the at least one end part (60) (col. 22, lines 5-19).
13. **With regard to claim 10**, in figures 12, 20 and 21, Suzuki discloses a method of manufacturing a gas-tight high-pressure burner that includes an end closure member (17) a feed through member (5), and a discharge vessel (11, 12) comprising: coating at least one of the end closure member (17) and the discharge vessel (11, 12) with a coating layer (62A-C), gas tight connecting the end closure member (17) to the discharge vessel (11, 12) using a sealant (61), wherein the coating layer (62A) is located between the discharge vessel (11, 12) and the sealant (61), filling the discharge vessel (11, 12) with an ionisable filling through a feed through opening (17a) in the end closure member (17), and closing the feed-through opening by inserting the feed-through member (5) through the feed-through opening (17a) and gas-tight connecting the feed-through member (5) to the end closure member (17), (col. 11, lines 4-67; col. 22, lines 5-39).
14. **With regard to claim 21**, in figures 12, 20, 21 and 28, Suzuki discloses a method of assembling a lamp comprising: first sealing at least one cap (17) to a discharge vessel (11), the cap (17) comprising an opening (17a), the sealing process comprising increasing temperature and/or pressure within the vessel (11) and using a

sealant (61) and a coating (62A), wherein the coating (62A) is located between the discharge vessel (11) and the sealant (61); after sealing, filling the vessel (11) with at least one desired salt and/or at least one desired filling gas, through the opening (17a); positioning at least one feed through member (5) in the opening after the vessel is filled (col. 31, lines 54-64), such that the at least one feed through member (5) extends through the opening (17a) and into the discharge vessel (11); and second sealing the at least one feed-through member in the opening (17a) using a technique resulting in substantially less temperature and pressure increase within the vessel than was required by the first sealing so that the sealing and coating from the first sealing are not damaged by temperature and pressure from contents of the vessel (col. 11, lines 4-67; col. 22, lines 5-39; col. 33, lines 1-7).

15. **With regard to claim 23**, in figure 12, Suzuki discloses that the coating layer (62A) is of a material comprising at least W (col. 4, line 28).

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. **Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as applied to claim 1 above, in view of itself.**

18. **With regard to claim 8**, Suzuki, in figure 12, discloses all of the limitations, except figure 12 does not expressly disclose that a cross-section of the feed through opening varies along a longitudinal axis of the end closure member.

19. Suzuki, in figure 19, teaches a high-pressure burner where a cross-section of the feed through opening varies along a longitudinal axis (col. 27, lines 5-7), so that the feed-through member (6) may be inserted more easily.

20. At the time of invention, it would have been obvious for a person having ordinary skill in the art to construct the high-pressure burner of Suzuki, figure 12, where a cross-section of the feed through opening varies along a longitudinal axis of the end closure member, as taught by Suzuki, figure 19, so that the feed-through member may be inserted more easily.

**21. Claims 9 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki, in view of Hendricx et al., WO 00/67294.**

22. **With regard to claim 9**, in figure 12, Suzuki discloses a discharge vessel (11, 12) that includes an end part (60) and a discharge cavity (13), an end closure member (17) that includes a feed-through opening (17a) for filling the discharge cavity (col. 8, lines 16-18), a feed through member (5) that extends through the feed-through opening (17a) and is gas-tight sealed to the end closure member (17), wherein at least one coating layer (62A) and sealant 61) are located gas-tight connected between the end part (60) of the discharge vessel (11, 12) and the end closure member (17), and wherein the at least one coating layer (62A) is located between the discharge vessel (11, 12) and the sealant (61) (col. 22, lines 5-39).

23. Suzuki does not expressly disclose that the discharge vessel is in an automotive headlamp.
24. Hendricx, in figure 1, teaches a lamp comprising a gas-tight high-pressure burner (3) that is arranged in an automotive headlamp unit (page 2, lines 8-27).
25. At the time of invention, it would have been obvious for a person having ordinary skill in the art to construct the lamp disclosed by Suzuki, in an automotive headlamp unit, as taught by Hendricx, because it has excellent color rendering and long life, characteristics making it particularly good for use in a complex shape headlamp.
26. **With regard to claim 11**, in figure 12, Suzuki discloses a lamp that includes a gas-tight high-pressure burner, the burner including: at least one metal halide discharge vessel (11, 12) that includes at least one end part (60) and a discharge cavity (13); at least one end closure member (17); at least one sealant (61) between the end closure member (17) and the end part (60); at least one feed-through opening (17a) in the end closure member (17) for high-pressure filling the discharge cavity (13), at least one feed-through member (5) that extends through the feed-through opening (17a) via a gas-tight connection to the end closure member (17); and at least one gas-tight connected coating layer (62A-C) covering one or more of the end part (60) of the discharge vessel (11, 12), wherein the coating layer (62A-C) is located between the discharge vessel (11, 12) and the at least one sealant (61), gas tight bonding the end closure member (17) and the discharge vessel (11, 12) via the coating being stronger than gas-tight bonding of the end closure member and the discharge vessel via the sealant (col. 22, lines 5-39).



27. Suzuki does not expressly disclose that the lamp is in an automotive headlamp.
28. Hendricx, in figure 1, teaches a lamp comprising a gas-tight high-pressure burner (3) that is arranged in an automotive headlamp unit (page 2, lines 8-27).
29. At the time of invention, it would have been obvious for a person having ordinary skill in the art to construct the lamp disclosed by Suzuki, in an automotive headlamp unit, as taught by Hendricx, because it has excellent color rendering and long life, characteristics making it particularly good for use in a complex shape headlamp.
30. **With regard to claim 12**, in figure 12, Suzuki discloses that the coating layer has an expansion coefficient in the range between  $4 \cdot 10^{-6}$  and  $12 \cdot 10^{-6} \text{ K}^{-1}$  for temperatures in the range of 298 K to 2174 K (inherent of the materials (col. 4, lines 7-13 & 43-45)).
31. **With regard to claim 13**, in figure 12, Suzuki discloses that the coating layer (62A) is chemically resistant towards oxides and iodides (col. 4, line 30).
32. **With regard to claim 14**, in figure 12, Suzuki discloses that the coating layer (62A) is of a material comprises a material selected from the group comprising at least W, Mo, and/or Pt (col. 4, line 28).
33. **With regard to claim 15**, in figure 12, Suzuki discloses that the sealant and the at least one feed-through member comprise materials that are needed for welding, laser welding, resistance welding, soldering, brazing bonding with adhesive materials, primary shaping, sintering, sealing or any combination thereof (col. 4, line 28; col. 8, line 31).
34. **With regard to claim 16**, the Examiner notes that the claim limitation "the electrode is introduced into the feed-through opening after the discharge vessel is filled

limitation" is drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation has been considered, but not patentably distinct over Suzuki (see MPEP 2113). The examiner further notes that Suzuki anticipates this limitation (col. 31, lines 54-64).

35. **With regard to claim 17**, Suzuki, in figure 12, and Hendricx disclose all of the limitations, as described in the rejection of claims 11 and 16 above, except figure 12 does not expressly disclose that the feed-through opening has an outer cross section area and an inner cross section area nearer the discharge cavity, and the outer cross section area is greater than or equal to the inner cross section area.

36. Suzuki, in figure 19, teaches a high-pressure burner where the feed-through opening has an outer cross section area (89a) and an inner cross section area (of section 81) nearer the discharge cavity, and the outer cross section area (89a) is greater than or equal to the inner cross section area (col. 27, lines 5-7), so that the feed-through member (6) may be inserted more easily.

37. At the time of invention, it would have been obvious for a person having ordinary skill in the art to construct the high-pressure burner of Suzuki and Hendricx where the feed-through opening has an outer cross section area and an inner cross section area nearer the discharge cavity, and the outer cross section area is greater than or equal to

the inner cross section area, as taught by Suzuki, figure 19, so that the feed-through member may be inserted more easily.

38. **With regard to claim 18**, in figure 12, Suzuki discloses that the end closure members are made of a functionally graded cermet material including first and second materials denominated A and B arranged such that, in select portions, concentration of compound A substantially increases where component B decreases causing gradients of both A and B, while an outer layer has a constant concentration of A and B (col. 6, lines 22-34).

39. **With regard to claim 19**, in figure 12, Suzuki discloses that compound A comprises  $Al_2O_3$  and compound B comprises Mo (col. 6, lines 22-34).

40. **Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki, as applied to claim 1 above, in view of Sobieski, U.S. Patent No. 4,110,657.**

41. **With regard to claim 22**, Suzuki discloses all of the limitations, except it does not expressly disclose that the coating layer is of a material comprising at least Pt.

42. Sobieski, in figure 1, teaches a high-pressure burner (11) having an end portion sealing member (22) with a Pt coating to avoid corrosion from the gas fill (col. 3, lines 33-41).

43. At the time of invention, it would have been obvious for a person having ordinary skill in the art to construct the Suzuki high-pressure burner, of claim 1, where the coating layer is of a material comprising at least Pt, so that the end closure member is protected from corrosion from the gas fill, as taught by Sobieski.

***Response to Arguments***

44. Applicant's arguments have been considered but are moot in view of the new grounds for rejection.

***Conclusion***

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Hollweg whose telephone number is (571) 270-1739. The examiner can normally be reached on Monday through Friday 7:30am-5:00pm E.S.T..

46. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

47. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TH/

/NIMESHKUMAR D. PATEL/

Application/Control Number: 10/535,636

Page 12

Art Unit: 2879

Supervisory Patent Examiner, Art Unit 2879